

Amendments to the Claims:

A clean version of the entire set of pending claims, including amendments to the claims, is submitted herewith per 37 CFR 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)
2. (Currently Amended) A method to determine the spatial distribution of magnetic particles in an examination area of an object, comprising:
 - a) generating ~~an-a first~~, imaging, magnetic field with a spatial distribution of the imaging magnetic field strength such that the examination area consists of a first sub-area with lower magnetic field strength and a second sub-area with a higher magnetic field strength,
 - b) changing the spatial location of both sub-areas in the examination area so that the magnetization of the particles changes locally,
 - c) acquiring signals that depend on the magnetization in the examination area influenced by the changed spatial location of both sub-areas in the examination area, and
 - d) evaluating said signals to determine the spatial distribution of the magnetic particles in the examination area, wherein the magnetic particles before or during the determining of the spatial distribution of the magnetic particles in the examination area are exposed to a ~~second~~, varying, magnetic field so as at least to reduce agglomeration of the magnetic particles.
3. (Previously Presented) ~~A method according to claim 2~~ The method of claim 2, wherein a gradient field in the examination area has a varying magnetic field superimposed on the imaging magnetic field at least some of the time.

4. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 2, wherein a strength of the varying magnetic field is sufficient to cancel out attractive forces resulting in the ~~clumping or agglomeration between neighboring~~ of the magnetic particles in the examination area.

5. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 2, wherein the varying magnetic field is applied in all three spatial dimensions.

6. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 25, wherein the particles have an average size or expansion of at least 30 nm.

7. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 2, wherein the varying magnetic field is applied~~[,]~~ in a locally restricted, in portion of the examination area until the ~~clumping or agglomeration of~~ the magnetic particles in this location is at least the locally restricted portion of the examination area is reduced.

8. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 2, wherein the varying magnetic field ~~with~~ has a frequency in the a range of approximately 10 to 500 kHz is used.

9. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 2, wherein the field strength of the varying magnetic field is at least two times higher than the field strength of the imaging magnetic field.

10. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 2, wherein the magnetic particles are monodomain particles and wherein the field strength of the varying magnetic field is at least 30 mTesla.

11. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 25, wherein the magnetic particles comprise a nonmagnetic core covered with a magnetic coating and wherein the field strength of the varying magnetic field is at least five mTesla.

12. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 2, wherein the varying magnetic field has a power of at least 500 W and is applied in intermittent pulses such that the average power input is less than 500 W.

13. (Currently Amended) ~~A method according to claim 2~~ The method of claim 2, wherein the varying magnetic field is applied as one or more pulses having an amplitude that decays to zero.

14. (Currently Amended) ~~A method according to claim 2~~ The method of claim 2, wherein the magnetic particles are in a liquid medium in the examination area and ~~the~~ a frequency of the varying magnetic field is chosen in view of ~~the~~ a viscosity of said liquid medium.

15. (Currently Amended) ~~A method according to claim 14~~ The method of claim 13, wherein the medium surrounding the magnetic particles is blood and ~~the~~ a frequency of the varying magnetic field is between 0.7 and 1.3 MHz.

16. (Currently Amended) ~~A method according to claim 2~~ The method of claim 2, further comprising administering the magnetic particles to the examination area, wherein the varying magnetic field is applied to the magnetic particles before administering the magnetic particles to the examination area.

17. (Currently Amended) ~~A method according to claim 2~~ The method of claim 2, further comprising administering the magnetic particles to the examination area, wherein the magnetic particles are administered to the examination area in an

agglomerated state and wherein the magnetic particles in only a part of the examination area are de-agglomerated by exposing only said part of the examination area to the varying magnetic field.

18. (Currently Amended) ~~A method according to claim 2~~ The method of claim 2, wherein the frequency of the varying magnetic field is between 0.8 to 1.2 times the frequency of the imaging magnetic field and wherein the varying magnetic field and the imaging magnetic field are alternately applied to the examination area.

19. (Canceled)

20. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 25, wherein at least one of the magnetic particle particles is a multi or mono-domain particle that ~~can be~~ is capable of being reverse magnetized by at least one of Neel rotation and Brownian rotation.

21. (Currently Amended) ~~A method as claimed in claim 2~~ The method of claim 25, wherein at least one of the magnetic particle particles is a hard or soft magnetic multi-domain particle.

22. (Currently Amended) An apparatus to determine the spatial distribution of magnetic particles in an area of examination of an object, the apparatus comprising:

- a) means to generate a for generating a first, imaging, magnetic field with a spatial distribution of the magnetic field strength such that the area of examination consists of a first sub-area with lower magnetic field strength and a second sub-area with a higher magnetic field strength,
- b) means to change for changing the spatial location of both sub-areas in the area of examination so that the magnetization of the particles changes locally,
- c) means for the acquisition of acquiring signals that depend on the magnetization in the area of examination influenced by this change,

d) means for ~~the evaluation of said~~ evaluating the signals to determine ~~the a~~ spatial distribution of the magnetic particles in the area of examination; and
e) wherein the means for changing the spatial location of both sub-areas in the area of examination include means to impose ~~for imposing~~ in at least parts of the first sub-area with lower magnetic field strengths, a second, varying magnetic field.

23-24. (Cancelled)

25. (New) The method of claim 2 further including introducing the magnetic particles into the area of examination.